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Amendments to the Claims

1. (Currently amended) A system comprising:
a compressor comprising:
 - a housing;
 - a first rotor held by the housing for rotation about a first axis; ;
 - a second rotor held by the housing for rotation about a second axis;
 - a third rotor held by the housing for rotation about a third axis;
 - a first compression path having suction and discharge ends; ~~and~~
 - a second compression path, independent of the first compression path and having suction and discharge ends;at least one condenser;
at least one expansion device;
at least one evaporator; and
a plurality of conduits coupling the compressor, the at least one condenser, the at least one expansion device, and the at least one evaporator so as to define first and second at least partially separate circuits respectively associated with the first and second compression paths,
wherein at least one of:
 - the discharge end of the first compression path is at a different pressure than the discharge end of the second compression path; and
 - the suction end of the first compression path is at a different pressure than the suction end of the second compression path.
2. (Currently amended) The ~~compressor~~ system of claim 1 wherein:
 - the first compression path is associated with the first rotor and the second rotor; and
 - the second compression path is associated with the first rotor and the third rotor.
3. (Canceled)
4. (Withdrawn-currently amended) The ~~cooling~~ system of claim 3 1 wherein:

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the discharge end of the first compression path is at the same pressure as the suction end of the second compression path.

5. (Withdrawn-currently amended) The ~~apparatus~~ system of claim 1 ~~wherein 4 further comprising:~~

the at least one condenser includes a first condenser;

the at least one expansion device includes a first expansion device;

the at least one evaporator includes a first evaporator; and

the plurality of conduits includes one or more first conduits coupling the first condenser, the first expansion device and the first evaporator to the housing to define a first flowpath from the discharge end of the second compression path to the suction end of the first compression path.

6. (Currently amended) An apparatus comprising:

a housing;

a first rotor held within the housing for rotation about a first axis;

a second rotor enmeshed with the first rotor and held within the housing for rotation about a second axis; ~~and~~

a third rotor enmeshed with the first rotor and held within the housing for rotation about a third axis;

a first condenser;

a first evaporator;

one or more first conduits coupling the first condenser and the first evaporator to the housing;

a second condenser;

a second evaporator; and

one or more second conduits coupling the second condenser and the second evaporator to the housing,

wherein:

the housing comprises:

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a first surface cooperating with the first and second rotors to define a first inlet port;

a second surface cooperating with the first and second rotors to define a first outlet port;

a third surface cooperating with the first and third rotors to define a second inlet port; and

a ~~third~~ fourth surface cooperating with the first and third rotors to define a second outlet port;

the one or more first conduits define a first flowpath from the first outlet port through the first evaporator and first condenser and to the first inlet port

the one or more second conduits define a second flowpath from the second outlet port through the second evaporator and second condenser and to the second inlet port; and

at least one of: the first and second inlet ports are at a different pressure than each other, and the first and second outlet ports are at a different pressure than each other.

7. (Canceled)
8. (Withdrawn) The apparatus of claim 6 wherein:
the first outlet port is at the same pressure as the second inlet port.
9. (Canceled)
10. (Withdrawn-currently amended) The apparatus of claim 9 6 wherein:
there are no economizer branches off the first flowpath.
11. (Withdrawn-currently amended) The apparatus of claim 9 6 further comprising:
an economizer heat exchanger having:
a first leg along the first flowpath; and
a second leg, in heat exchange relation with the first leg, the second leg being
along a diversion flowpath from a location along the first flowpath between the first

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condenser and the first leg to join a second flowpath from the first outlet port to the second inlet port.

12. (Original) The apparatus of claim 6 wherein either:
the first and second inlet ports are at like pressure; or
the first and second outlet ports are at like pressure.
13. (Original) The apparatus of claim 6 wherein either:
the first and second inlet ports form a common inlet port; or
the first and second outlet ports form a common outlet port.
14. (Original) The apparatus of claim 6 wherein:
the first rotor is a male rotor; and
the second and third rotors are female rotors.
15. (Currently amended) An apparatus comprising:
a first rotor held for rotation in at least a first direction about a first axis;
a second rotor enmeshed with the first rotor and held for rotation about a second axis;
a third rotor enmeshed with the first rotor and held for rotation about a third axis; ~~and~~
means cooperating with the first, second, and third rotors for providing:
a first volume index associated with interaction of the first and second rotors
when the first rotor is driven in the first direction; and
a second volume index associated with interaction of the first and third rotors
when the first rotor is driven in the first direction, the second volume index different from
the first volume index; and
first and second refrigerant flows along non-intersecting first and second flowpaths
through the apparatus.
16. (Canceled)

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17. (Currently amended) The apparatus of claim 15 ~~in combination with~~ wherein the first and second refrigerant flows along first and second flowpaths through the apparatus intersect ~~intersecting~~ at a suction side of the apparatus.
18. (Currently amended) The apparatus of claim 15 ~~in combination with~~ wherein the first and second refrigerant flows along first and second flowpaths through the apparatus intersect ~~intersecting~~ at a discharge side of the apparatus.
19. (New) The cooling system of claim 1 wherein:
said at least one condenser includes first and second condensers;
said at least one expansion device includes first and second expansion devices;
said at least one evaporator includes first and second evaporators;
the first condenser, first expansion device, and first condenser are along the first circuit;
and
the second condenser, second expansion device, and second condenser are along the second circuit.
20. (New) The cooling system of claim 19 wherein:
the first and second circuits are non-intersecting.
21. (New) The apparatus of claim 6 further comprising:
a first expansion device along the first flowpath; and
a second expansion device along the second flowpath.
22. (New) The apparatus of claim 15 further comprising:
a first evaporator along the first flowpath; and
a second evaporator along the second flowpath.
23. (New) The apparatus of claim 15 further comprising:
a first condenser along the first flowpath; and

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a second condenser along the second flowpath.

24. (New) The apparatus of claim 24 further comprising:
a first evaporator along the first flowpath; and
a second evaporator along the second flowpath.